### REMARKS / ARGUMENTS

## I. General Remarks and Disposition of the Claims

Please consider the application in view of the following remarks. Applicants thank the Examiner for his careful consideration of this application.

Claims 1-3, 8-11, 13-31, 35-41, and 43-65 are pending in this application. Claims 1-3, 8-11, 13-31, 35-41, 43-65 are rejected. Claims 1, 13, 14, 16, 18-20, 22, 25-27, 31, 35, 37, 43-45, 47-49, 51, and 54-65 have been amended herein. Claims 66-67 have been added herein. These amendments are supported by the specification as filed. All the amendments are made in a good faith effort to advance the prosecution on the merits of this case. It should not be assumed that the amendments made herein were made for reasons related to patentability. Applicants respectfully reserve the right to pursue the claims as originally and/or previously presented in an appropriate continuing application. Applicants respectfully request that the above amendments be entered and further request reconsideration in light of the amendments and remarks contained herein.

# II. Remarks Regarding Rejections Under 35 U.S.C. § 103

## A. Claims 1-3, 8-11, 13-25, 31, 35-41, 43-54, and 57-65

Claims 1-3, 8-11, 13-25, 31, 35-41, 43-54, and 57-65 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 6,006,838 to Whiteley et al. (hereinafter "Whiteley") in view of WO 03/048508 by Akinlade et al. (hereinafter "Akinlade"). With respect to this rejection, the Office Action states:

With regard to claims 1-3, 9, 11, 14, 16-18, 21-25, 31, 35-37, 39, 41, 44-47, 50-54, 57, and 61, Whiteley discloses a method of "selectively stimulating multiple production zones or intervals within a subterranean oil or gas well in a single trip" (column 2, lines 47-48). Whiteley further teaches that his apparatus can be interconnected with a drill string (column 3, lines 14-18). The stimulating step comprises jetting a stimulation fluid through ports, or nozzles (24) at a pressure sufficient to create a cavity in the section of the subterranean formation (see column 4, lines 44-47 and figure 3). Whiteley also teaches shutting the annulus between the drill string and the wellbore wall using a packer (3). The ports (24) are opened by a sliding sleeve (22).

While Whiteley discloses the use of his system with drillpipe, Whiteley fails to explicitly disclose the use of his system during a rotary drilling application in conjunction with a drill bit.

Akinlade discloses "a method of injecting a stream of treatment fluid into an earth formation in the course of drilling a borehole into the earth formation" (see abstract). However, Akinlade's system is not used for stimulating a wellbore, rather it is for sealing a wellbore. That said, Akinlade does teach a method of injecting fluid into a formation during a drilling operation.

All of the component parts of the method are known, i.e. stimulating a formation using a stimulation tool interconnected with a drill string, and injecting treatment fluid during a rotary drilling operation. What is not shown is stimulating a formation during a rotary drilling operation.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have combined the methods of Whiteley and Akinlade so that the formation could be stimulated during a rotary drilling operation without tripping out of the borehole, since there appears to be nothing precluding the apparatus of Whiteley from being used in conjunction with the drill bit shown by Akinlade.

With regard to claims 8, 10, 19, 20, 38, 40, 48, 49, 58-60, and 62-65, a "second fluid" could comprise drilling fluid, which could contain many different types of additives to enhance the stimulation of the formation and clean the formation. Furthermore, the drilling fluid could be pumped at a pressure sufficient to enlarge the cavity formed by the initial fluid injection.

With regard to claim 13, 15, and 43, Whiteley in view of Akinlade fails to disclose the stimulation fluid being an unweighted drilling fluid, nor does Whiteley in view of Akinlade disclose the stimulation fluid being a relative permeability modifier.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used, in conjunction with Whiteley's device, a stimulating fluid with a chemistry similar to that of drilling fluid, said fluid being an unweighted drilling fluid or a relative permeability modifier, as the examiner hereby takes official notice that it was notoriously conventional in the art to have used drilling fluids with a multitude of additives to both stimulate formations as well as prevent drilling fluid loss into formations.

(Office Action at 2-4.) Applicants respectfully disagree with these rejections. To form a basis for a § 103(a) rejection, a *prima facie* case of obviousness must be established. Obviousness is determined by construing the scope of the prior art, identifying the differences between the

claims and the prior art, determining the level of skill in the pertinent art at the time of the invention, and considering objective evidence present in the application indicating obviousness or nonobviousness. *Graham v. John Deere*, 383 U.S. 1, 17 (1966). Based on the foregoing, an explicit, cogent reason must be provided as to why it would be obvious to modify the prior art to arrive at the claimed invention. *See Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd.*, No. 06-1329 (Fed. Cir. 2007).

In KSR Int'l Co. v. Teleflex Inc., the Supreme Court reaffirmed the Graham analysis, and indicated that while it should not be rigidly applied, a useful test for determining obviousness is to consider whether there is a teaching, suggestion or motivation in the prior art that would lead one of ordinary skill in the art to combine known elements of the prior art to arrive at the claimed invention. See KSR International Co. v. Teleflex, Inc., 550 U.S. (2007) (slip op., at 14). Furthermore, the Court emphasized that a patent examiner's analysis in determining obviousness should be made explicit in order to facilitate review. Id. Applicants respectfully submit that the Office Action has not established a prima facie case of obviousness, in that the combination of Whiteley and Akinlade fails to teach or suggest each and every element of the present claims. In addition, Applicants respectfully submit that the Office Action has not established a prima facie case of obviousness, in that combining Whiteley and Akinlade in the manner suggested by the Office Action is improper.

First, the combination of Whiteley and Akinlade fails to teach or suggest "fracturing a section of the subterranean formation," as recited in claims 1 and 57 or "fracturing multiple sections of the subterranean formation," as recited in claim 31 Whiteley is directed to the matrix acidizing of producing zones. Whiteley, col. 1, lines 6-13. Specifically, Whiteley describes an assembly that "is especially suited to perform a combination of matrix acidizing jobs and near wellbore erosion jobs." Whiteley, however, fails to disclose, teach, or suggest a method for fracturing a section or multiple sections of a subterranean formation. Nor does Akinlade supply this missing element. Rather, Akinlade is directed to methods of sealing a subterranean formation. See Akinlade, Abstract. Accordingly, Whiteley in view of Akinlade fails to teach or suggest each and every limitation of independent claims 1, 31, and 57.

Furthermore, Applicants respectfully submit that the combination of Akinlade, which is directed to sealing a subterranean formation, with Whiteley, which is directed to matrix acidizing, would fail to obviate these claims, because such a combination would be improper. In

determining whether a combination is proper, "[a] prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention." MPEP § 2141.02.VI. As the Examiner states, "Akinlade's system is not used for stimulating a wellbore, rather it is for sealing a wellbore." (Office Action at 3.) In fact, Akinlade teaches away from stimulating a wellbore during a drilling operation. In particular, Akinlade teaches that shutting off fractures during drilling operations is highly desirable and that fractures may lead to a multitude of problems during drilling operations. See Akinlade, page 1. As such, because Akinlade teaches away from stimulating a subterranean formation during a drilling operation, it would be improper to combine Akinlade with Whiteley, which is directed to the matrix acidizing of a producing zone.

Accordingly, because the combination of Whiteley and Akinlade fails to teach every element of independent claims 1, 31, and 57, and the combination of Akinlade with Whiteley would be improper, Applicants respectfully assert that independent claims 1, 31, and 57 are not obviated by Whiteley in view of Akinlade. Claims 2, 3, 8-11, 13-25, 35-41, 43-54, and 58-65 depend, either directly or indirectly, from independent claims 1, 31, and 57. These dependent claims include all the elements of the independent claims, and thus are allowable for at least the reasons cited above. See 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request withdrawal of these rejections.

#### B. Claims 26, 27, 30, 55, and 56

Claims 26, 27, 30, 55, and 56 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whiteley in view of Akinlade and in further view of U.S. Patent No. 5,111,881 issued to Soliman et al. (hereinafter "Soliman"). As discussed in Section II (A) above, Whiteley in view of Akinlade does not teach or suggest "fracturing a section of the subterranean formation" or "fracturing multiple sections of the subterranean formation," as recited in independent claims 1 and 31. Nor does the combination of Whiteley and Akinlade with Soliman teach this element. Rather, the Examiner merely relies on Soliman for its alleged teaching of sealing a treated subterranean formation. (Office Action at 5.) Applicants therefore respectfully assert the combination of Whiteley, Akinlade, and Soliman does not teach, suggest, or otherwise disclose all elements of claims 1 and 31, as amended herein, and thus these claims are allowable over Whiteley, Akinlade, and Soliman. Since claims 26, 27, 30, 55, and 56 depend, either directly or indirectly, from claim 1 or 31, these dependent claims also incorporate these

limitations that none of the references teach or suggest, and are thus similarly allowable. See 35 U.S.C. § 112  $\P$  4 (2004).

#### C. Claims 26-29, 55, and 56

Claims 26-29, 55, and 56 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whiteley in view of Akinlade in further view of U.S. Reissued Patent No. 27,459 issued to Guinn et al. (hereinafter "Guinn"). As discussed in Section II (A) above, Whiteley in view of Akinlade does not teach or suggest "fracturing a section of the subterranean formation" or "fracturing multiple sections of the subterranean formation," as recited in independent claims 1 and 31. Nor does the combination of Whiteley and Akinlade with Guinn teach this element. Rather, the Examiner merely relies on Guinn for its alleged teaching of sealing a treated subterranean formation. (Office Action at 5.) Applicants therefore respectfully assert the combination of Whiteley, Akinlade, and Guinn does not teach, suggest, or otherwise disclose all elements of claims 1 and 31, as amended herein, and thus these claims are allowable over Whiteley, Akinlade, and Guinn. Since claims 26-29, 55, and 56 depend, either directly or indirectly, from claim 1 or 31, these dependent claims also incorporate these limitations that none of the references teach or suggest, and are thus similarly allowable. See 35 U.S.C. § 112 ¶ 4 (2004).

#### III. Remarks Regarding New Claims

Applicants respectfully submit that claims 66 and 67 are allowable. Claims 66 and 67 depend directly or indirectly from independent claims 1 and 31, which Applicants have demonstrated is allowable in Section II above. These dependent claims contain all of the limitations of the independent claim they depend on, and thus are allowable for at least the same reasons. See 35 U.S.C. § 112 ¶ 4 (2004). Therefore, Applicants respectfully request the timely issuance of a Notice of Allowance for these claims.

#### IV. No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the cited references. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's

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additional statements, such as, for example, any statements relating to what would be obvious to a person of ordinary skill in the art.

#### SUMMARY

In light of the above amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

The Commissioner is also hereby authorized to debit Baker Botts L.L.P.'s Deposit Account No. 02-0383, Order Number 063718.0478, in the amount of \$50.00 for the new claim fee under 37 C.F.R. § 1.17(i). Applicants believe that no other fees are due at this time. Should the Commissioner deem that any fees are due, including any fees for extensions of time, Applicants respectfully request that the Commissioner accept this as a Petition Therefor, and direct that any additional fees be charged to Baker Botts, L.L.P.'s Deposit Account No. 02-0383, Order Number 063718.0478.

Respectfully submitted,

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